



Method And Rake Receiver For Code-Tracking In  
Communication Systems

Cross-Reference To Related Application

This application claims priority of European Patent  
5 Application No. 00300254.0, which was filed on January 14,  
2000.

Description

Field of the Invention

10 The invention relates to a method and a rake receiver  
for code-tracking in communication systems in general and in  
code division multiple access (CDMA) communication systems  
being subject to multipath fading in particular.

Prior Art

15 Digital wireless communication systems are of  
increasing interest for all types of data and speech  
transmission. A frequently used method in particular for  
mobile cellular communications is code division multiple  
access (CDMA). For CDMA the signal to be transmitted is  
20 typically spread to a multiple of its original bandwidth.  
The signal with spread bandwidth is less sensitive to  
interference and the spectral power density is reduced.  
Commonly, direct sequence CDMA is used, where the signal is  
multiplied or correlated by a code sequence before  
25 modulation. The spread and correlated symbols are called  
chips. Using a plurality of code sequences being orthogonal  
to each other a plurality of communication connections can  
utilise the same frequency band. Due to the orthogonality of  
the codes the transmitted signals can be decoded or  
30 decorrelated uniquely in the receiver. An advantageous group

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**SPECIFICATION**

- o Amend paragraph beginning at page 11, line 31, as follows:

Herewith, said documents are incorporated ~~as subject matter of the present invention~~ by reference.

Amendments to the Specification

On page 4 at line 23, insert the heading, --Summary--.

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